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FINAL EXAMINATION

TRIMESTER 2, 2015/2016

MSA1013 – MULTIMEDIA AUTHORING AND SCRIPTING
(All sections / Groups)

1st MARCH 2016
2.30 p.m. – 4.30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of 4 pages including cover page with 7 questions only.

2. Attempt **SIX** out of **SEVEN** questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please print all your answers in the answer booklet provided.

Question 1

a. Write an *actionscript 3* to show and hide an object named "Circle" using buttons in Adobe Flash movie. Button_1 to show and Button_2 to hide. Below is some hint :

```
button_1.addEventListener(MouseEvent.CLICK, f_Hide);

function f_Hide (event:MouseEvent):void
{
   // write suitable code here
}
```

                                                                     (2 marks)

b. Explain the steps to convert or enable the flash *actionscript 3* in HTML5 canvas via Adobe Flash CC.

                                                                     (2 marks)

c. Discuss three (3) major problems with Adobe Flash.   (6 marks)

Question 2

A client requested you to develop a multimedia learning website for primary school standard 6 science subject. The material is coming from a textbook. The duration is two months starting from 1st March 2016. As the project leader you need to identify the roles of your team of 4 people including yourself, and ensure the project is delivered on time.

a. List and explain the roles of the 4 team members identified as A,B,C,D.   (4 marks)

b. Draw a Gantt Chart for the project. Indicate A,B,C,D in your chart.   (2 marks)

c. Discuss four(4) advantages of using Adobe Captivate compared to Adobe Flash as the main development platform.   (4 marks)

Continued ...

Question 3

a.   As a developer of online multimedia content, discuss two(2) strategies on how you can protect your content from piracy.   (2 marks)

b.   Explain two(2) differences between server-side script and client-side script. Give examples.   (2 marks)

c.   Write a JavaScript function **hello( )** to pop up a window showing "Hello" . Write a proper code to trigger the function by a click of a button.   (2 marks)

d.   Discuss two(2) factors in choosing programming language(s) to develop an online multimedia application. Give examples.   (4 marks)

Question 4

a.   Draw a flowchart and write the JavaScript for the following:
Request user to enter password that allow 2 wrong attempts only. Third unsuccessful attempt will be blocked. The correct password is <u>MultimediaScipting</u>   (3 marks)

b.   Explain what is responsive design?   (1 mark)

c.   Discuss how the following factors influence your multimedia design?
     i.   Users' device screen resolution
     ii.   User's device memory and processor   (2 marks)

d.   Explain what is black box testing and regression testing.   (2 marks)

e.   Explain the differences between android app and iOS app market in terms of revenue and competition.   (2 marks)

Question 5

a.   Write a for loop to generate the following sequence of numbers:
     i.   1,4,9,16,25,36,49,64,81,100
     ii.   100,95,90,85,80……until 0   (2 marks)

b.   Write a script to :
     i.   accept a number from user and test whether it is an odd or even number
     ii.   accept two numbers and display the result of the multiplication   (2 marks)

c.   Explain 3-click rule and 2-second rule in multimedia content design.   (2 marks)

d.   Discuss two(2) advantages of Waterfall Model and two(2) advantages of Agile Model in multimedia project development.   (4 marks)

Continued …

Question 6

a. As a multimedia content author explain the :
    i. differences between designing for mouse interface and touch interface, focusing on <u>hover</u> and <u>accuracy</u>.   (2 marks)

    ii. Fitts's Law and 80/20 Rule applied in User Experience(UX).   (2 marks)

b. A school is planning to create a multimedia learning content for their students. Discuss the main advantage and disadvantage of outsourcing the project.   (2 marks)

c. Discuss four(4) issues related to open source multimedia authoring software. (4 marks)

Question 7

a. Trace the following for loop. Complete the table to trace the value and output:

```
for{ a=0 ; a<=10 ; a++ }
    {       document.write(i);
            a=a+2;
    }
```

Iteration	a	test	body	update
1	0		0	

(2 marks)

b. Write a script to get an input of student's mark ranging from 0 to 100 and display a suitable grade for the mark. Grade A for 80 and above, B for 50 and above but below 80 and F for below 50. Your code must be able to detect invalid inputs. It must loop until the user entered "x" or "X" to exit. Example of output :

```
Please enter mark or press X to exit : 85
The mark is 85 and the grade is A.
Please enter mark or press X to exit : -5
Invalid input
Please enter mark or press X to exit : x
```

The bold and underlined words are the input entered by the user.   (4 marks)

c. Generate a HTML table with 2 columns and 100 rows using a for loop. The colour of the rows is alternating blue and red. Each row is numbered from 1 to 100 as shown below. The word <blue> and <red> indicate the background colour and should not be shown in the web browser.

1 <blue>	<blue>
2 <red>	<red>
3 <blue>	<blue>
4 <red>	<red>

(4 marks)

END OF PAPER